WE CLAIM:

1. An antibody composition for enriching for mesenchymal progenitor cells comprising antibodies specific for the antigens (a) CD2 and/or CD3 and/or CD5 and/or both CD4 and CD8; (b) CD66b and/or CD16 and/or CD11b and/or CD15; and (c) CD19 and/or CD20 and/or CD21 and/or CD22 and/or CD24 and/or Ig.

2. An antibody composition according to claim 1 comprising antibodies specific for the antigens (a) CD3; (b) CD66b and (c) CD19.

3. An antibody composition according to claim 1 comprising antibodies specific for the antigens (a) CD2 and/or CD3 and/or CD5 and/or both CD4 and CD8; (b) CD66b and/or CD16 and/or CD11b and/or CD15; (c) CD19 and/or CD20 and/or CD21 and/or CD22 and/or CD24 and/or Ig; (d) CD14 and (e) CD33 and/or CD38.

4. An antibody composition according to claim 1 comprising antibodies specific for the antigens (a) CD3; (b) CD66b; (c) CD19; (d) CD14 and (e) CD33 or CD38.

5. An antibody composition according to claim 1 comprising antibodies specific for the antigens (a) CD3; (b) CD66b; (c) CD19; (d) CD14 and (e) CD38.

6. An antibody composition according to claim 1 comprising antibodies specific for the antigens (a) CD2 and/or CD3 and/or CD5 and/or both CD4 and CD8; (b) CD66b and/or CD16 and/or CD11b and/or CD15; (c) CD19 and/or CD20 and/or CD21 and/or CD22 and/or CD24 and/or Ig; (d) CD14; (e) CD33 and/or CD38; and (f) CD56.

7. An antibody composition according to claim 1 wherein the antibodies are monoclonal antibodies.

8. An antibody composition according to claim 7 wherein the antibodies are labelled with a marker or they are directly or indirectly conjugated to a matrix.

9. An antibody composition according to claim 7 wherein the antibodies are labelled with biotin or a fluorochrome.

10. An antibody composition according to claim 8 wherein the matrix is magnetic beads, a panning surface, dense particles for density centrifugation, an adsorption column, or an adsorption membrane.

11. An antibody composition according to claim 7 wherein each of the monoclonal antibodies is incorporated in a tetrameric antibody complex which comprises a first monoclonal antibody of a first animal species from the antibody composition according to claim 1, and a second monoclonal antibody of the first animal species which is capable of binding to at least one antigen on the surface of a matrix, which have been conjugated to form a cyclic tetramer with two monoclonal antibodies of a second animal species directed against the Fc-fragments of the antibodies of the first animal species.

12. An antibody composition according to claim 1 further comprising at least one antibody that binds to erythrocytes.

13. A negative selection process for enriching and recovering mesenchymal progenitor cells in a sample comprising (1) reacting the sample with an antibody composition containing antibodies capable of binding to the antigens (a) CD2 and/or CD3 and/or CD5 and/or both CD4 and CD8; (b) CD66b and/or CD16 and/or CD11b and/or CD15; and (c) CD19 and/or CD20 and/or CD21 and/or CD22 and/or CD24 and/or Ig, under conditions so that conjugates are formed between the antibodies and cells in the sample containing the (a) CD2 and/or CD3 and/or CD5 and/or both CD4 and CD8; (b) CD66b and/or CD16 and/or CD11b and/or CD15; and (c) CD19 and/or

CD20 and/or CD21 and/or CD22 and/or CD24 and/or Ig, on their surfaces; (2) removing the conjugates; and (3) recovering a cell preparation which is enriched in mesenchymal progenitor cells.

14. A process according to claim 13 wherein the antibodies in the antibody composition are monoclonal antibodies.

15. A process according to claim 14, wherein the antibodies in the antibody composition are labelled with a marker or they are conjugated to a matrix.

16. A process according to claim 14, wherein the antibodies in the antibody composition are labelled with biotin or a fluorochrome.

17. A process according to claim 14, wherein the matrix is magnetic beads, a panning surface, dense particles for density centrifugation, an adsorption column, or an adsorption membrane.

18. A process according to claim 14, wherein each of the monoclonal antibodies in the antibody composition is incorporated in a tetrameric antibody complex which comprises a first monoclonal antibody of a first animal species from the antibody composition according to claim 2, and a second monoclonal antibody of the first animal species which is capable of binding to at least one antigen on the surface of a matrix, which have been conjugated to form a cyclic tetramer with two monoclonal antibodies of a second animal species directed against the Fc-fragments of the antibodies of the first animal species.

19. A negative selection method for enriching and recovering mesenchymal progenitor cells in a sample containing the mesenchymal progenitor cells, erythrocytes and undesired cells comprising: (1) contacting the sample with an antibody composition comprising (i) antibodies capable of binding to the antigens (a) CD2 and/or CD3 and/or CD5 and/or both CD4 and CD8; (b) CD66b and/or CD16 and/or CD11b and/or CD15; and (c) CD19

and/or CD20 and/or CD21 and/or CD22 and/or CD24 and/or Ig linked to (ii) at least one antibody that binds to the erythrocytes, under conditions to allow immunorosettes of the undesired cells and the erythrocytes to form; and (2) separating the immunorosettes from the remainder of the sample to obtain a sample enriched in mesenchymal progenitor cells.

20. A negative selection method according to claim 19 for enriching and recovering mesenchymal progenitor cells in a sample containing the mesenchymal progenitor cells, erythrocytes and undesired cells comprising: (1) contacting the sample with an antibody composition comprising (i) antibodies capable of binding to the antigens (a) CD3; (b) CD66b; (c) CD19; (d) CD14 and (e) CD33 or CD38 linked to (ii) at least one antibody that binds to the erythrocytes, under conditions to allow immunorosettes of the undesired cells and the erythrocytes to form; and (2) separating the immunorosettes from the remainder of the sample to obtain a sample enriched in mesenchymal progenitor cells.